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NOTICE OF ALLOWANCE AND FEE(S) DUE

84220 7590 03/01/2010

UC Berkeley - OTL Bozicevic, Field & Francis LLP 1900 University Avenue, Suite 200 East Palo Alto, CA 94303 EXAMINER
DUFFY, PATRICIA ANN

PAPER NUMBER

ART UNIT

DATE MAILED: 03/01/2010

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|-----------------------|------------------|
| 10/547,999 | 09/07/2006 | Daniel Portnoy | B01-050 (BERK-017CIP) | 6366 |

TITLE OF INVENTION: METHODS OF ELICITING OR BOOSTING A CELLULAR IMMUNE RESPONSE

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES | \$755 | \$300 | \$0 | \$1055 | 06/01/2010 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THE APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

| appropriate. All further indicated unless correcte maintenance fee notifica | correspondence including ed below or directed of tions. | ng the Patent, adva nerwise in Block 1, | nce orders and notification by (a) specifying a new | | | | t correspondence address as arate "FEE ADDRESS" for |
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| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address) | | | | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, mus have its own certificate of mailing or transmission. | | | |
| 84220 | 7590 03/01 | /2010 | | | Certif | icate of Mailing or Trans | emission |
| | & Francis LLP Avenue, Suite 200 | | | I he Stat addi tran | reby certify that this es Postal Service with ressed to the Mail S smitted to the USPTC | Fee(s) Transmittal is bein a sufficient postage for fir top ISSUE FEE address (571) 273-2885, on the | g deposited with the United st class mail in an envelope above, or being facsimile late indicated below. |
| East Palo Alto, 0 | CA 94303 | | | Г | | | (Depositor's name) |
| | | | | | | | (Signature) |
| | | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVE | NTOR | A | TTORNEY DOCKET NO. | CONFIRMATION NO. |
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| EXAM | | ART UNIT | CLASS-SUBCLA | SS | J | | |
| DUFFY, PAT | | I645 | 424-234100 | | | | |
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| PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSIG | less an assignee is ident h in 37 CFR 3.11. Comp GNEE | ified below, no ass pletion of this form | (B) RESIDENCE: | the p ng an (CITY | atent. If an assignee assignment. and STATE OR CO | UNTRY) | oument has been filed for |
| | | 8 (| | | | | |
| 4a. The following fee(s) Issue Fee | are submitted: | | 4b. Payment of Fee(s) A check is encl | | ise first reapply any | previously paid issue fee | shown above) |
| | vo small entity discount j | permitted) | Payment by cre | dit car | d. Form PTO-2038 is | | |
| Advance Order - | # of Copies | | The Director is overpayment, to | hereby Depo | authorized to charge sit Account Number | the required fee(s), any d (enclose a | eficiency, or credit any an extra copy of this form). |
| 5. Change in Entity Sta | tus (from status indicate is SMALL ENTITY stati | | b Apolicant is | no Ion | oer claiming SMALL | ENTITY status. Sec 37 C | FR 1 27(e)(2) |
| | | | | | | | he assignee or other party in |
| Authorized Signature | | | | | | | |
| Typed or printed nam | | | Registration No. | | | | |
| | | EP 1311 The info | emation is required to obt- | in or : | - | | d by the USPTO to process) |
| an application. Confiden submitting the completes this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223 | iation is required by 37 C titality is governed by 35 d application form to the ions for reducing this bu 'irginia 22313-1450. DO 13-1450. | U.S.C. 122 and 37 U.S.C. 122 and 37 e USPTO. Time will rden, should be sen D NOT SEND FEES | CFR 1.14. This collection Vary depending upon the Chief Information OR COMPLETED FOR | in of the is est of the individual of the indivi | cuain a ocalefit by the imated to take 12 min idual case. Any com- er, U.S. Patent and Tr D THIS ADDRESS. S | puone winch is to file (an intes to complete, includi ments on the amount of ti ademark Office, U.S. Der END TO: Commissioner | d by the USPTO to process) ng gathering, preparing, and me you require to complete sartment of Commerce, P.O. for Patents, P.O. Box 1450, |

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| UC Berkeley - | erkeley - OTL DUFFY, PATRICIA ANN | | | | RICIA ANN | |
| | Bozicevic, Field & Francis LLP | | | | PAPER NUMBER | |
| 1900 University Avenue, Suite 200 East Palo Alto, CA 94303 | | | 1645 | | | |

DATE MAILED: 03/01/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Application No. Applicant(s) 10/547.999 PORTNOY ET AL. Notice of Allowability Examiner Art Unit Patricia A. Duffy 1645 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 2-2-2010. The allowed claim(s) is/are 14, 15, 25, 28-34. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. T Examiner's Statement of Reasons for Allowance of Biological Material □ Other . /Patricia A. Duffy/

Primary Examiner, Art Unit 1645

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Bret Field on 2-22-2010.

The application has been amended as follows:

In the claims:

Cancelled claim 26

Amended claim 28, line 1, deleted "26" and inserted -25—in its place.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia A. Duffy whose telephone number is (571)272-0855. The examiner can normally be reached on M. T. W. Th

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mondesi Robert can be reached on (571)272-0956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1645

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patricia A. Duffy/ Primary Examiner, Art Unit 1645